What is claimed is:

1. A video decoding method performed by a video decoding apparatus, the method comprising:

receiving a bitstream comprising a picture header for a current picture;

parsing, from the picture header, at least one of a first flag related to whether information for an inter slice is present in the picture header or a second flag related to whether information for an intra slice is present in the picture header;

deriving prediction samples for blocks in slices in the current picture based on at least one of the first flag or the second flag, wherein the prediction samples are derived by performing at least one of an intra prediction or an inter prediction; and

generating reconstructed samples based on the prediction samples,

wherein based on a value of the first flag being equal to 1, the information for the inter slice including at least one of a first syntax element representing a difference between based 2 logarithm of a minimum size resulting from quad-tree splitting and based 2 logarithm of a minimum coding block size in the inter slice in the current picture and a second syntax element representing a maximum hierarchy depth for a coding unit resulting from multi-type tree splitting in the inter slice in the current picture is comprised in the picture header.

2. The video decoding method of claim 1, wherein slices in the current picture have a type of I slice based on that a value of the first flag is 0.

3. The video decoding method of claim 1, wherein 0 or more slices in the current picture have a type of P slice or B slice based on that a value of the first flag is 1.

4. A video encoding method performed by a video encoding apparatus, the method comprising:

determining types of slices in a current picture, the current picture including the slices;

generating at least one of a first flag related to whether information for an inter slice is present in a picture header related to the current picture or a second flag related to whether information for an intra slice is present in the picture header; and

encoding image information including at least one of the first flag or the second flag,

wherein the first flag and the second flag are comprised in the picture header of the image information,

wherein based on a value of the first flag being equal to 1, the information for the inter slice including at least one of a first syntax element representing a difference between based 2 logarithm of a minimum size resulting from quad-tree splitting and based 2 logarithm of a minimum coding block size in the inter slice in the current picture and a second syntax element representing a maximum hierarchy depth for a coding unit resulting from multi-type tree splitting in the inter slice in the current picture is comprised in the picture header.

5. The video encoding method of claim 4, wherein a value of a first flag is 0 based on that all slices in the current picture have a type of I slice.

6. The video encoding method of claim 4, wherein a value of a first flag is 1 based on that one or more slices in the current picture have a type of P slice or B slice.

7. A non-transitory computer-readable digital storage medium storing a bitstream generated by a video encoding method, the video encoding method comprising:

determining types of slices in a current picture, the current picture including the slices;

generating at least one of a first flag related to whether information for an inter slice is present in a picture header related to the current picture or a second flag related to whether information for an intra slice is present in the picture header; and

encoding image information including at least one of the first flag or the second flag,

wherein the first flag and the second flag are comprised in the picture header of the image information,

wherein based on a value of the first flag being equal to 1, the information for the inter slice including at least one of a first syntax element representing a difference between based 2 logarithm of a minimum size resulting from quad-tree splitting and based 2 logarithm of a minimum coding block size in the inter slice in the current picture and a second syntax element

representing a maximum hierarchy depth for a coding unit resulting from multi-type tree splitting in the inter slice in the current picture is comprised in the picture header.

8. A transmission method of data for a video, the method comprising:

obtaining a bitstream for the video, wherein the bitstream is generated based on determining types of slices in a current picture, the current picture including the slices, generating at least one of a first flag related to whether information for an inter slice is present in a picture header related to the current picture or a second flag related to whether information for an intra slice is present in the picture header, and encoding image information including at least one of the first flag or the second flag; and

transmitting the data comprising the bitstream,

wherein the first flag and the second flag are comprised in the picture header of the image information,

wherein based on a value of the first flag being equal to 1, the information for the inter slice including at least one of a first syntax element representing a difference between based 2 logarithm of a minimum size resulting from quad-tree splitting and based 2 logarithm of a minimum coding block size in the inter slice in the current picture and a second syntax element representing a maximum hierarchy depth for a coding unit resulting from multi-type tree splitting in the inter slice in the current picture is comprised in the picture header.